

REMARKS

In the Office Action mailed October 22, 2004 claims 4-16 were rejected under 35 USC §112. Claims 4-16 were rejected under §102 in view of Bradley (USP 6,496,846). Applicant here amends the claims 1-11 to clarify the invention and comply with §112, and cancels claims 12-16.

Preliminary Amendment

Applicant thanks the Examiner for pointing out the discrepancy with the Preliminary Amendment. Applicant has renumbered the claims in accordance with the Examiner's suggestions. Applicant submits that claims 1-16 are pending since claims 1-3 were not canceled in the Preliminary Amendment.

Drawings

Applicant thanks the Examiner for pointing out the absence of reference numbers on the drawings. Applicant provides replacement sheets in accordance with the Examiner's suggestions.

§112 Rejections

Claims 4-16 were rejected under paragraph 2 as indefinite. Applicant has amended claim 4 to clarify the mutually exclusive circuit. Applicant has amended claim 7 to clarify the "group." Application has amended claims 13-15 to clarify the group terms. Since the terms identified by the Examiner are now clarified, Applicant requests that the Examiner reconsider and withdraw the §112 rejections.

Prior Art Rejections

A rejection under 35 USC §102 requires that the cited reference teach all the claimed elements. A rejection under 35 USC §103 requires that the combined references suggest the claimed combination. (MPEP 706 and 2141 et seq.).

The Examiner contends that Bradley discloses a dynamic circuit for implementing a mutually exclusive circuit to indicate groups three term carry logic. The Examiner further contends that the terms could be expressed as mutually exclusive terms.

Applicant contends this is not correct. Bradley does not provide any teaching or suggestion of using mutually exclusive logic, and particularly not the type of logic recited in the pending claims.

If Bradley had one of his signals high as the Examiner contends (see col. 2 lines 29-30 as cited by the Examiner), then two of the resulting signals would be affirmative rather than one. This is fundamentally different than the pending claim recitations. Bradley's output is 100 or 010 or 001 for gpk (see col. 2 lines 29-30), but this is not how the present invention works as recited in the pending claims.

The invention takes an asserted low signal and drives the other signals high (see Specification page 5 lines 3-5 stating "one and only one dynamic node among nodes 124, 134 and 144 will be at logic zero when the clock is high"), which results in 011, 101 or 110 for the dynamic nodes. This is fundamentally different than Bradley since it permits the nodes to be computed in exclusive logic. The invention uses this "exclusive property . . . to ensure that the dynamic nodes 124, 134 and 144 will recover fully from noise." (Specification page 5 lines 11-12). This structure and method is specifically recited in the pending claims, and is not taught or suggested by Bradley.

Consequently, Applicant requests that the Examiner reconsider and withdraw the §102 rejections on these grounds. If the Examiner wishes to uphold his rejection, Applicant requests a telephone interview to discuss the mathematics recited in the pending claims and to demonstrate that the citation to Bradley is fundamentally different.

If any matters can be resolved by telephone, Applicant requests that the Patent and Trademark Office call the Applicant at the telephone number listed below.

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Respectfully submitted,

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